

HOPE.ID	Biopsy	Body.part	Body.part.type	Modality	axial.long	depth	
	1	3 Liver	Met	US	46	58	
	1	2 Liver	Met	US	34	60	
	1	1 Liver	Met	US	18	72	
	2	1 Liver	Met	US	17	22	
	3	2 LymphNode (	Met	US	23	11	
	3	1 LymphNode (	Met	US	12	22	
	4	1 Pancreas	Primary	surgery	NA	NA	
	5	1 Pancreas	Primary	EUS	19	NA	
	6	2 Liver	Met	CT	14	27	
	6	1 Liver	Met	US	18	52	
	8	1 Pancreas	Primary	EUS	52	NA	
	8	2 Liver	Met	EUS	30	NA	
	9	1 Pancreas	Primary	EUS	30	NA	
	9	2 Pancreas	Primary	EUS	25	NA	
	10	1 Liver	Met	EUS	NA	NA	
	10	1 Pancreas	Primary	EUS	40	NA	
	11	1 Pancreas	Primary	EUS	40	NA	
	12	1 Iliopsoas	Met	US	44	24	
	13	1 Pancreas	Primary	EUS	30	NA	
	14	1 Pancreas	Primary	EUS	40	NA	
	16	1 Pancreas	Primary	EUS	20	NA	
	17	1 Liver	Met	CT	34	31	
	18	1 Pancreas	Primary	EUS	69	NA	
	19	1 Liver	Met	US	34	39	
	20	1 Pancreas	Primary	surgery	NA	NA	
	21	1 LymphNode (	Met	US	18	27	
	22	1 Omental nod	Met	CT	11	29	
	23	1 Pancreas	Primary	EUS	30	NA	
	25	1 Pancreas	Primary	EUS	30	NA	
	26	1 Pancreas	Primary	EUS	20	NA	
	27	1 Liver	Met	US	13	30	
	27	2 Liver	Met	US	13	35	
	29	1 Pancreas	Primary	EUS	29	NA	
	29	2 Pancreas	Primary	surgery	NA	NA	
	30	1 Pancreas	Primary	EUS	37	NA	
	31	2 Pancreas	Primary	surgery	NA	NA	
	32	1 Lung	Met	CT	13	54	
	33	1 Lung	Met	CT	17	108	
	34	1 Liver	Met	US	13	25	
	37	1 Liver	Met	EUS	40	NA	
	38	1 Liver	Met	US	64	38	
	39	1 Liver	Met	US	50	58	

40	1 Liver	Met	US	43	34
40	2 Pancreas	Primary	EUS	27 NA	
41	1 Liver	Met	US	26	27
42	1 Pancreas	Primary	EUS	16 NA	
42	2 Pancreas	Primary	EUS	14 NA	
43	1 Pancreas	Primary	EUS	30 NA	
45	1 Liver	Met	US	70	20
46	1 Pancreas	Primary	EUS	40 NA	
47	1 Omental nod	Met	CT	20	67
48	1 LymphNode (	Met	CT	18	91
50	1 Liver	Met	US	30	22
52	2 Paracentesis	Met	IR paracente	NA	NA
52	1 Omental nod	Met	US	80	42
53	1 Liver	Met	US	30	51
54	1 Liver	Met	US	36	13
55	1 Pancreas	Primary	EUS	22 NA	
56	1 Liver	Met	US	50	46
57	1 Pleural Fluid	Met	IR pleuracent	NA	NA
58	1 Pancreas	Primary	surgery	NA	NA
59	1 Liver	Met	US	101	21
60	1 Liver	Met	US	29	15
62	1 Pancreas	Primary	surgery	NA	NA
64	1 Pancreas	Primary	surgery	NA	NA
65	1 Pancreas	Primary	surgery	NA	NA
66	1 Pancreas	Primary	EUS	25 NA	
68	1 Pancreas	Primary	EUS	30 NA	
69	1 Liver	Met	US	14	39
70	1 LymphNode (	Met	EUS	20 NA	
71	1 LymphNode (	Met	CT	45	117
73	1 bone (L iliac)	Met	CT	28	23
74	1 Omental nod	Met	CT	65	18
75	1 Omental nod	Met	US	52	25
76	1 Paracentesis	Met	IR paracente	NA	NA

Not included in predictors of success analysis because no biopsy received, biopsy not processed, or c

HOPE.ID	Biopsy	Body.part	Body.part.type	Modality	axial.long	depth
15	1 Pancreas	Primary	surgery			
26	2 Liver	Met				
31	1 Pancreas	Primary	EUS		18	
61	1 Pancreas	Primary	surgery			
24	1 Pancreas Cyst		FNA			
51	1 Peritoneal nodule					

63	1 Lung	Met	
67	1 Liver	Met	
35	1 Paracentesis	Met	IR paracentesis

Not included in predictors of success analysis because no biopsy performed

HOPE.ID	Biopsy	Body.part	Body.part.type	Modality	axial.long	depth
72		0				
7		0				
36		0				
44		0				
49		0				
28		0				

Grade	Tumor.Stage	Cellularity	Cellularity.ca	PDO Growth Status
Grade 2	IV		1	1 Insufficient Cells
	IV		25	2 Insufficient Cells
	IV		41	3 Insufficient Cells
	IIB	NA	NA	Insufficient Cells
Grade 3	IV		45	3 Drug Testing Performed
	IV		0	1 Insufficient Cells
Grade 2	IA		5	1 Insufficient Cells
	III	NA	NA	Lack of Expansion
Grade 2	IB		13	1 Drug Testing Performed
	IB	NA	NA	Insufficient Cells
	IV	NA	NA	Insufficient Cells
	IV			Insufficient Cells
Grade 2	III		5	1 Insufficient Cells
	III	NA	NA	Insufficient Cells
	IV	NA	NA	Drug Testing Performed
Grade 1	IV		75	3 Ready for drug testing
Grade 3	IIB		14	1 Insufficient Cells
	IV	NA	NA	Lack of Expansion
	IV	NA	NA	Lack of Expansion
Grade 1	III		70	3 Insufficient Cells
	IB		80	3 Insufficient Cells
Grade 2	III		13	1 Lack of Expansion
	IV		60	3 Insufficient Cells
Grade 2	IV		31	2 Drug Testing Performed
Grade 2	IB		60	3 Drug Testing Performed
Grade 1	IB		15	1 Insufficient Cells
	IV		0	1 Insufficient Cells
Grade 2	IB		10	1 Insufficient Cells
	IB	NA	NA	Insufficient Cells
	III	NA	NA	Insufficient Cells
	III		0	1 Lack of Expansion
	III	NA	NA	Lack of Expansion
Grade 2	IIA		5	1 Lack of Expansion
Grade 2	IIA		10	1 Insufficient Cells
	NA		0	1 Insufficient Cells
	IB	NA	NA	Lack of Expansion
	IIB	NA	NA	Insufficient Cells
Grade 1	IA		62	3 Drug Testing Performed
Grade 2	III		12	1 Drug Testing Performed
	IV		95	3 Insufficient Cells
Grade 2	IV		67	3 Drug Testing Performed
	IB		0	1 Lack of Expansion

	IV		0	1 Insufficient Cells
Grade 2	IV		20	1 Insufficient Cells
Grade 3	IV		5	1 Insufficient Cells
	IIB		0	1 Insufficient Cells
	IIB		0	1 Insufficient Cells
Grade 3	III		41	3 Insufficient Cells
Grade 2	IV		0	1 Lack of Expansion
Grade 2	IIA		15	1 Insufficient Cells
Grade 1	III		12	1 Lack of Expansion
	IV		0	1 Insufficient Cells
	IV		0	1 Lack of Expansion
	III	NA	NA	Drug Testing Performed
	III		50	3 Insufficient Cells
	IV		72	3 Lack of Expansion
Grade 2	IV		63	3 Lack of Expansion
	IB		50	3 Insufficient Cells
Grade 2	IV		25	2 Insufficient Cells
	III		0	1 Insufficient Cells
Grade 2	IIB		75	3 Lack of Expansion
	IV		0	1 Insufficient Cells
	III		0	1 Insufficient Cells
Grade 1	IB		70	3 Insufficient Cells
Grade 2	IB		30	2 Lack of Expansion
Grade 1	IA		30	2 Lack of Expansion
Grade 2	III		1	1 Insufficient Cells
Grade 3	IV		25	2 Drug Testing Performed
	IB		41	3 Lack of Expansion
	IIA		0	1 Insufficient Cells
Grade 1	III		86	3 Insufficient Cells
Grade 3	III		40	2 Insufficient Cells
Grade 2	IV		40	2 Insufficient Cells
	IA		50	3 Drug Testing Performed
	IV	NA	NA	Drug Testing Performed

Contamination

Grade	Tumor.Stage	Cellularity	Cellularity.ca	PDO Growth Status
				Contamination
				Contamination
				Contamination
				Contamination
				No biopsy processed
				No biopsy processed (biopsy

No biopsy received - extra cc
No biopsy received - Specim
No biopsy received (no fluid

Grade	Tumor.Stage	Cellularity	Cellularity.ca	PDO Growth Status
				No biopsy performed - clinic
				No biopsy performed - inelig
				No biopsy performed - subje
				No biopsy performed - subje
				No biopsy performed - subje
				No biopsy performed - withc

Days Until Initial Testing

96

131

91

106
96

265
93

88

35

135

100

85

target was negative for cancer)

ores clinically deferred
en handling error (frozen)
sent to our lab)

ally deferred
gible, no cancer
ct died prior to biopsy
ct died prior to biopsy
ct died prior to biopsy
drew prior to biopsy

Predictions of Organoid Growth

Clinical Variable	Groups	n
Biopsy Modality	CT /US IR guided core biopsy	37
	EUS guided FNB	27
	Paracentesis / Pleuracentesis	3
	Surgery	8
Tumor Cellularity	<= 20%	31
	> 20%	28
Biopsy Body Part	Primary	31
	Metastasis	44
Tumor Stage	I / II	27
	III / IV	48
Tumor Grade	Grade 1	8
	Grade 2	21
	Grade 3	6
Tumor Size Measurments	Measurement along Long Axis	63
	Depth from surface	37

*fe - Fisher's exact test

*kw - Kruskal-Wallis test

Organoid Growth Outcome			p-value
Successful Growth	Insufficient Cells	Lack of Expansion	
7	19	11	0.046 ^{fe}
3	21	3	
2	1	0	
1	3	4	
2	22	7	0.067 ^{fe}
8	14	6	
3	21	7	0.29 ^{fe}
10	23	11	
4	16	7	0.95 ^{fe}
9	28	11	
2	4	2	0.72 ^{fe}
5	10	6	
2	4	0	
9	40	14	0.88 ^{kw}
7	19	11	0.51 ^{kw}

HOPE Subject ID	Best Organoid Growth / Final Status
1	Insufficient Cells
2	Insufficient Cells
3	Drug Testing Performed
4	Insufficient Cells
5	Lack of Expansion
6	Drug Testing Performed
7	Ineligible
8	Insufficient Cells
9	Insufficient Cells
10	Drug Testing Performed
11	Insufficient Cells
12	Lack of Expansion
13	Lack of Expansion
14	Insufficient Cells
15	Contamination
16	Insufficient Cells
17	Lack of Expansion
18	Insufficient Cells
19	Drug Testing Performed
20	Drug Testing Performed
21	Insufficient Cells
22	Insufficient Cells
23	Insufficient Cells
24	No Cancer
25	Insufficient Cells
26	Insufficient Cells
27	Lack of Expansion
28	Withdrew
29	Lack of Expansion
30	Insufficient Cells
31	Lack of Expansion
32	Insufficient Cells
33	Drug Testing Performed
34	Drug Testing Performed
35	No cores for our lab
36	Died Prior To Biopsy
37	Insufficient Cells
38	Drug Testing Performed
39	Lack of Expansion

40	Insufficient Cells
41	Insufficient Cells
42	Insufficient Cells
43	Insufficient Cells
44	Died Prior To Biopsy
45	Lack of Expansion
46	Insufficient Cells
47	Lack of Expansion
48	Insufficient Cells
49	Died Prior To Biopsy
50	Lack of Expansion
51	No Cancer
52	Drug Testing Performed
53	Lack of Expansion
54	Lack of Expansion
55	Insufficient Cells
56	Insufficient Cells
57	Insufficient Cells
58	Lack of Expansion
59	Insufficient Cells
60	Insufficient Cells
61	Contamination
62	Insufficient Cells
63	No cores for our lab
64	Lack of Expansion
65	Lack of Expansion
66	Insufficient Cells
67	Specimen Handling Error
68	Drug Testing Performed
69	Lack of Expansion
70	Insufficient Cells
71	Insufficient Cells
72	Biopsy Clinically Deferred
73	Insufficient Cells
74	Insufficient Cells
75	Drug Testing Performed
76	Drug Testing Performed

[illegible]